# **Leaving None Behind**

Artisanal fishers' experiential knowledge contains qualities that can help the world face some of its most difficult problems including climate change. We need to value their wisdom

### One: Fisheries sustainability and small-scale fisheries: new perspectives for valorizing artisanal fishers

maritime countries have neglected and shunned their smallscale fisheries since the mid-1950s. This was done in the name of fisheries development, to make the transition to a modernized large-scale fishing industry. Despite this historical neglect and lack of support small-scale fisheries continue to exist and even thrive in most countries around the world even today, seven decades later. Small-scale fisheries are still "too big to ignore". Their enormous resilience and continued relevance are supported today by a considerable body of research studies worldwide.

Policy opportunities for supporting small-scale fishers must focus on radically different reasons. This requires a deeper and more nuanced interpretation of the SSF Guidelines.

International agencies including—importantly—FAO have recently made clarion calls for support to small-scale fisheries, largely with the policy objective of alleviating poverty and supporting welfare needs. This orientation alone is inadequate because it fails to perceive and appreciate many of the innate qualities of small-scale fisheries. We need new perspectives for the future.

Policy opportunities for supporting small-scale fishers must focus on radically different reasons. This requires a deeper and more nuanced interpretation of the Voluntary Guidelines for Responsible SmallScale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines).

Small-scale fisher people must be valorized for several reasons and through several ways. Here are some:

For their phenomenal vernacular ecological knowledge: This is the result of their intimate knowledge of natural processes, which yields a holistic understanding of the local aquatic ecosystems that they relate with regularly.

For their innate contribution to biodiversity conservation through convivial technologies: This results from combining their vernacular ecosystem knowledge with their use of small, passive, seasonal, diverse, skill-intensive and convivial fishing craftgear combinations.

For their largely owneroperated and collegial harvesting, which fosters greater equity and camaraderie in work: This is the result of work being viewed as livelihood and the resource as a shared heritage of the whole community.

For their cost-effective and energy-efficient operations with a lower carbon footprint: This is possible because, compared to all other types of fishing, small-scale fishers incur far lower costs to harvest a unit of fish due to limited use of nonrenewable energy.

For their entrepreneurial prowess in making high private and social returns despite limited means: This is a combined function of ecological knowledge, convivial technologies, energy-efficient operations and a collective work ethic that are embedded in the socio-cultural fabric of their communities.

For their greater contribution to food security and wholesome

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John Kurien delivering his keynote address at FAO International Symposium on Fisheries Sustainability, 18-21 November, 2019, Rome, Italy. Much of small-scale fishers' knowledge is encapsulated in pithy statements—economy with words, but prodigious with meaning

**nutrition for local rural consumers at affordable prices:** This happens due to the relatively smaller harvests, creating shorter value chains, mostly reaching the immediate hinterlands where they operate. In short, production by the masses for consumption by the masses.

For their generation of inclusive livelihoods — particularly among women — along these short value chains: This is due to the customary and familial orientation of their occupation.

For their provision of localized physical protection and security to coastal and riparian territory: This is made possible due to their spatially dispersed habitation and the ability to provide quick feedback about unusual events and activities.

For their vital contributions to the economy of their countries: This arises from, inter alia, the considerable foreign exchange from their fresh harvests; the tourist revenues they incidentally promote; and the significant ancillary employment they generate—all with negligible state subsidies.

For their protection of balanced life both below and above water: This

is achieved by commitment to socially, culturally and economically embedded management practices of their aquatic 'community commons'. This creates a moral economy yielding greater socioeconomic well-being, balanced with income and gender equity.

The list is even longer. It is obvious that supporting small-scale fishers and fisheries makes more ecological, economic, nutritional, social, cultural and moral sense. However, implementing this support will require practical and sustained support from three sources. One, there must be sociopolitical pressure from the dispersed micro-level struggles and also from the numerous examples of small-scale fishers doing things differently. The world bodies of small-scale fishers and their supporters have a crucial role in this task of aggregating the examples to create a global lobby.

Two, support from the committed researchers and scientists who have, over the last decades, diligently provided the solid scientific support for valorizing small-scale fisheries worldwide. They must continue to persevere in their efforts to provide

the synergistic push to goad the policymakers. Three, the national governments concerned, who must enact laws that guarantee the rights and democratic space for small-scale fisheries to flourish.

We are trending into a future with exciting possibilities. People are becoming 'prosumers'—at once producers and consumers); 3-D printing is challenging the virtue of economies of scale; the marginal cost of information is falling drastically; science-intensive use of renewable energy is gaining rapid ground; the call for globalizing localism, building creative commons, humanizing the economy and making it generative rather than extractive, is growing stronger.

Small-scale fishers and fisheries already imbibe many of these potentials. Given appropriate support and encouragement, they can become trailblazers. Rephrasing La Via Campesina, they can become the best bet "to feed the world (with fish) and cool the planet", two of the biggest global concerns today and into the future.

### Two: Fisheries sustainability and climate change: Inclusive Knowledge Partnerships in the Age of Climate Change

Small-scale fishers have an elaborate understanding and special narratives about the sea, the coast, the fish, the wind, the currents, the stars and the inter-relationships between them. Much of their knowledge is encapsulated in pithy statements—economy with words, but prodigious with meaning.

Consider this: The sea starts in the mountains. Here's another: Sandy beaches make playgrounds for waves. From their frolic we divine the mood of the distant sea.

In November 2017, as a freak cyclone was brewing unannounced in the Arabian Sea, the elders of the village of Marianad in the Indian state of Kerala watched the manner in which the waves were breaking on the beach. They decided it would not be judicious to venture into the sea for the next few days. In many other villages in

southern Kerala, where the beaches were totally eroded and replaced with stone seawalls, the fishers were unable to watch the play of the waves. They set out to fish. Two days later, while fishing, they became hapless victims of the freak cyclone.

Even at the beginning of this millennium the spectre of climate change was still viewed with some degree of cautious scepticism at national and international levels. In the words of author Amitav Ghosh, "It is humanity's great derangement that we refuse to grasp the scale and violence of climate change."

The experiential reality of extreme weather events and temperature change of the last two decades has resulted in a wider acceptance of an undeniable climate crisis looming large on land and at sea. As Pope Francis reminded us, "We must never forget that the natural environment is a collective good, the patrimony of all humanity and the responsibility of everyone."

The Intergovernmental Panel on Climate Change (IPCC) has given adequate warnings about the bleak future scenario, supported with hard scientific facts. Scientists of FAO and others have eloquently articulated the impacts of climate change on marine ecosystem production in societies dependent on fisheries. There is no dearth of scientific facts, ominous warnings or ethical exaltations.

To achieve fisheries sustainability that will leave none behind we must understand and take into serious consideration the 'experiential and concrete lived reality' of fishing communities. They have been least responsible for climate change but they are on ground zero and always the first to be affected by the unpredictable conditions and extreme events. We need to reconcile the 'cognitive scientific facts' of global science with the collective responses spurred by the normative imaginations of fishing communities who deal with nature on a day-to-day basis.

People's actions when encountering these sudden, emergent, placebased and local situations yield an accumulated wealth of 'experiential knowledge'. Sadly, this is not aggregated and transmitted up to the policy-making level. We must explicitly recognize that scientific knowledge is not the only type of knowledge relevant to a science-policy nexus. Other types of knowledge—local, indigenous, social, political, moral, religious and institutional—are also valid, exchanged and co-created.

Climate change is already spurring local-specific changes in fishery yields and species distribution. Fathoming these impacts will call for both good science and nuanced observation of local changes. Today we are well positioned to create a bridging opportunity that will put together a credible and inclusive research process and science-technology studies that will encompass relations between laboratory scientists and those neglected barefoot worker-scientistsour vastly knowledgeable fisherfolk. Such collaborative ventures within countries will lead to co-evolution and joint construction of knowledge, resulting in a visible difference in the lives of millions of ordinary fisher people, yielding greater fisheries sustainability in the age of climate change.

## Three: Fisheries sustainability and the blue economy: Trans-Generational Justice

The concept of the Blue Economy has generated considerable discussions at a variety of global platforms and highlevel panels formed by governments and civil society. However, children like Greta Thunberg and many others may want to ask the adult discussants a question: Will your numerous debates and discussions about the Blue Economy include your moral obligation towards us and ensure that we will have enough fish to eat and access to bountiful and clean seas to frolic in and enjoy?

The social, cultural and moral aspects of human society should extend beyond one's lifetime. But there is a contradiction in not wanting to discriminate against future generations and, at the same time, giving priority to those who are living now. In other words, you cannot save the fish for

the future and eat it all now. This concept was well understood by the Urhobo people of the Niger Delta who say "resources belong to the dead, the living and those yet to be born". We have forgotten such wisdom but it will surely be the next generation's concern.

If we accept this position, then we are obliged to stand by the claim of future generations to the resources of the planet and be mindful of our own present consumption patterns. Mahatma Gandhi is often quoted to say that our planet's resources are adequate for everyone's needs but not everyone's greed. It is for this reason that the justice and equity perspectives regarding the Blue Economy—that have been well articulated by smallscale fisher organizations and their supporters—gain significance. While we rightly stress the issue of human rights for today, we also need to think beyond and raise the matter of trans-generational access and use of resources from the oceans.

By delving into this question, there is a big policy opportunity for the current generation to spearhead the normative agenda for transgenerational justice into the Blue Economy debates. We must give the welfare of future generations weight in our economic and moral decisions of today. Once again, to borrow from Gandhi's words, the future depends on what we do in the present.

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International Symposium on Fisheries Sustainability strengthening the science-policy nexus, Rome, 18-21 November 2019

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